

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 November 2000 (16.11.2000)

PCT

(10) International Publication Number
WO 00/69163 A3

(51) International Patent Classification⁷: **H04N 7/16**
(21) International Application Number: **PCT/US00/12710**
(22) International Filing Date: **10 May 2000 (10.05.2000)**
(25) Filing Language: **English**
(26) Publication Language: **English**
(30) Priority Data:
60/133,398 **10 May 1999 (10.05.1999)** **US**
(71) Applicant (for all designated States except US): **TELECOM PARTNERS LTD.** [US/US]; 300 North Broad Street, Doylestown, PA 18901 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(72) Inventor; and
(75) Inventor/Applicant (for US only): **ELDERING, Charles, A.** [US/US]; 315 Hedgerow Lane, Doylestown, PA 18901 (US).

Published:

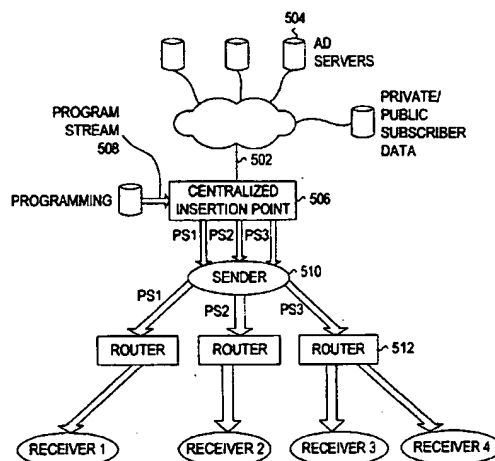
- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

(74) Agents: **BLASKO, John, P.** et al.; J.P. Blasko Professional Corp., 107 North Broad Street, Doylestown, PA 18901 (US).

(88) Date of publication of the international search report:
18 January 2001

[Continued on next page]

(54) Title: **ADVERTISEMENT SUBGROUPS FOR DIGITAL STREAMS**



(57) Abstract: A targeted advertising system based on subgroups. Different subgroups are formed based on one or more subscriber characteristics, and different targeted advertisements transmitted to the different subgroups. In the Internet-environment, the subgroups are formed by utilizing multicast addresses. In cable-based and satellite-based systems, the subgroups are formed by node configurations. The targeted advertisements (504) may be transmitted simultaneously with programming (508) and inserted locally, or may be inserted at a centralized distribution point (506) such as a router or cable television local head-end. An apparatus is presented which receives n program streams and m advertisements, and creates p presentation streams containing targeted advertisements, where p is greater than n .



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/12710

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04N 7/16

US CL : 345/327; 348/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 345/327; 348/6-13; 455/3.1-6.3; H04N 7/16, 7/173

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X -- Y	US 5,815,671 A (MORRISON) 29 September 1998 abstract, columns 2-3 & figures 2-4	1-33 ----- 34-37
X -- Y	US 5,446,919 A (WILKINS) 29 August 1995 whole document	1-33 ----- 34-37
X	US 5,155,591 A (WACHOB) 13 October 1992 whole document	34

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
A document defining the general state of the art which is not considered to be of particular relevance	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
E earlier document published on or after the international filing date	*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*&* document member of the same patent family
O document referring to an oral disclosure, use, exhibition or other means	
P document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

22 SEPTEMBER 2000

Date of mailing of the international search report

08 NOV 2000

Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

CHRISTOPHER GRANT

Telephone No. (703) 305-4155

THIS PAGE BLANK (USPTO)